articles that compose it have been published at various times in diverse British periodicals and newspapers, and were re-written and enlarged for publication in book form. "Secrets of Earth and Sea" is modern, interesting and reliable, and is easily the best thing in popular science that has appeared in several years.

C. L. F.

THE *A B C* OF EVOLUTION. By W. J. McCabe. G. P. Putnam's Sons, 1920. $1.50.

In a book altogether too small to deal adequately with so extensive a subject as evolution Mr. McCabe has done remarkably well. By judicious selection of material he has managed to get into 124 pages of text an outline of the history of the earth, the development of animals and plants, and something about the peculiar evolutionary problems of man. The story is told in plain but attractive English, and there are numerous references to other works in which more elaborate discussion of various points may be found.

As is almost invariable in books that attempt to popularize science, there are some respects in which this volume is hardly to be relied upon. McCabe's preference for the lon-disproved Laplacian hypothesis of an originally gaseous and molten earth, and his doubts regarding the reliability of Mendelism indicate that he has an imperfect acquaintance with the literature of modern geology and biology. His explanation of the causes of glacial periods, while an approach to the truth, hardly agrees with present geologic knowledge. But these errors form a very small part of the book, and do not detract greatly from its general value. As a primer for the man unacquainted with the elementary facts of biology "The A B C of Evolution" is not only useful, but good.

C. L. F.

ZOOLOGY. By T. D. A. Cockerell. World Book Company, 1920. $3.00

To the person accustomed to the dryness of the average zoology text Dr. Cockerell's book comes as both a surprise and a relief. Although intended primarily for use in college classes, it will be of value to anyone who desires a comprehensive, reliable, and at the same time interesting account of the many divisions of the science of animals. There is no such thing as a good all-round natural history; it is well that there is a zoology that in a measure meets the need of the man who does not care for the "nature study" book, and who has no great interest in the anatomical details on which taxonomy is based.

The book begins with a consideration of some of the fundamental characters of life—reproduction, heredity, sex, nourishment, breathing. There follow an excellent chapter on the history of life, a biography of Darwin, another of Linnaeus, and then a clear and interesting discussion of the whys and hows of classification. To the every-day man the zoologist's complicated system of Latin and Greek names means just about nothing; to the average college student it is merely a use-

less jumble of syllables that must be remembered in a certain order in order to get a grade. Dr. Cockerell shows what classification is, what it means, and why it is used, and when he gets through it is neither formidable nor jumbled. The spirit of science is order, but few texts give that impression to the person reading them; this fact makes this new book stand out as a landmark in zoology texts.

The discussion of the various groups of animals occupies some 240 pages, and is clear, reliable, and interesting. The classification used is thoroughly modern, and the whole treatment is designed to arouse a desire for further information. The chapters on the evolution of horses and elephants and man, the descriptions of the various life divisions of the earth, of the laws and principles of eugenics, and of the work of great zoologists of the last century are fully as satisfactory as the systematic portion of the book, and perhaps even more important. They not only show the progressive attitude taken by Dr. Cockerell, but make his book of exceptional value to teachers, students, and to the interested but untechnical laymen who have never seen the inside of a college.

C. L. F.

THE LIFE OF MATTER. By Arthur Turnbull. Philadelphia, J. B. Lippencott Co. $3.00. London, Williams and Norgate.

This book is a puzzle; one cannot tell what the author is trying to do. He says in his subtitle that the book is an "inquiry and adventure." His preface is a curve labeled: "The Valley," "The Mountain," and "The Outlook," below which is either a dedication or acknowledgment "To the Many Helpers." There are some pages of unintelligible stuff purporting to be a summary, an outline, and something else printed in the manner of free verse and meaning nothing at all. Then comes two pages of mystical gibberish that are not even grammatical, and convey nothing whatever in the way of information. Following this burst comes the first clearly sensible thing in the book: a table of the elements, with their symbols and atomic weights.

The first section of the book is headed "The Valley" and presumably has some relation to the curve labeled "Preface." It consists of multitudinous quotations from various authors, dealing with types and properties of matter, and with various phases of living matter. There are several pages of clippings dealing with natural selection, and numerous others on the effects of environment, stimuli, and so on; finally the section ends in its 118th page.

The second section is called "The Mountain"—probably another reference to the "preface." Here is a fair sample of its clarity of style:

THE METHOD OF SEARCH

Seek. See. Seize. Follow. Forbear.

How scale this barrier of rocks and overhanging boulders? Silently humble.